

THAT WHICH IS CLAIMED IS:

1. A directory service comprising a plurality of records associating product identification strings with batch identifications for corresponding products, wherein a product type has a plurality of associated product identification strings  
5 associated with different batches of the product type and wherein the corresponding products are provided with a machine readable label including an associated one of the product identification strings.

2. The directory service of Claim 1 wherein the product identification  
10 strings comprise bar code values and the machine readable labels comprise bar code labels.

3. The directory service of Claim 1 wherein the records further comprise status information associated with the different batches and further  
15 comprising an input interface configured to receive a batch status request from a user and to provide the status information to the user responsive to the received batch status request.

4. The directory service of Claim 3 wherein the directory service  
20 includes records for products from different vendors.

5. The directory service of Claim 3 wherein the records are associated with products of a single vendor.

25 6. A method of communicating product status information comprising:  
maintaining a record of a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product;  
transmitting a batch status request to a directory service maintaining batch  
30 status information at selected intervals and/or responsive to a user request; and  
receiving the requested batch status information for the product.

7. The method of Claim 6 wherein the batch status request includes no personal information of the user.

8. The method of Claim 6 further comprising scanning a product label  
5 of the product to obtain the product identification string.

9. The method of Claim 8 wherein transmitting a batch status request comprises transmitting a batch status request for the product identification string responsive to scanning of the product label.  
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10. The method of Claim 9 wherein maintaining a record comprises maintaining a temporary record of the product identification string while transmitting the batch status request.

11. The method of Claim 8 wherein receiving the requested batch status information is followed by communicating the batch status information to the user.  
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12. The method of Claim 11 wherein the batch status information indicates a recall of the product and wherein communicating the batch status  
20 information to the user comprises notifying the user of the recall.

13. The method of Claim 8 wherein maintaining a record comprises maintaining a plurality of records of product identification strings associated with a plurality of products of the user.  
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14. The method of Claim 13 further comprising registering the user with a trusted entity and wherein transmitting a batch status request comprises transmitting batch status requests for the plurality of products to the trusted entity and receiving the requested batch status information comprises receiving batch  
30 status information for the plurality of products from the trusted entity.

15. The method of Claim 14 wherein the received batch status information includes a certification of the trusted entity.

16. The method of Claim 14 wherein the received batch status  
5 information includes a signature of an inspecting authority generating the batch status information.

17. The method of Claim 13 wherein transmitting a batch status request comprises transmitting batch status requests for different ones of the products to  
10 different entities and wherein receiving the requested batch status information comprises receiving batch status information for respective products from the different entities.

18. The method of Claim 17 wherein the received batch status  
15 information includes a certification of the different entities.

19. The method of Claim 17 wherein the received batch status information includes a signature of an inspecting authority generating the batch status information.

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20. The method of Claim 8 wherein scanning a product label comprises scanning the product label using a consumer appliance.

21. The method of Claim 20 wherein the consumer appliance comprises  
25 a cooking appliance and wherein receiving the batch status information is followed by notifying the user if the batch status information indicates a recall of the product.

22. The method of Claim 21 further comprising maintaining a record of  
30 recalled products at the cooking appliance and wherein scanning a product label comprises scanning the product label if a user attempts to cook the product in the

cooking appliance and wherein the method further comprises notifying a user of the cooking appliance of a recall if a user attempts to cook a recalled product in the cooking appliance.

5           23.     The method of Claim 20 wherein the consumer appliance comprises a food storage appliance and wherein receiving the batch status information is followed by notifying the user if the batch status information indicates a recall of the product.

10           24.     The method of Claim 23 further comprising maintaining a record of recalled products at the food storage appliance and wherein scanning a product label comprises scanning the product label if a user attempts to store the product in the food storage appliance and wherein the method further comprises notifying a user of the food storage appliance of a recall if a user attempts to store a recalled  
15     product in the food storage appliance.

            25.     The method of Claim 20 wherein the consumer appliance comprises an information appliance.

20           26.     The method of Claim 6 wherein maintaining a record comprises maintaining a plurality of records of product identification strings associated with a plurality of products of the user and wherein the method further comprises:

            scanning a plurality of machine readable labels associated with the products of the user at a purchase location; and  
25           generating a sales receipt including a machine readable label configured to allow retrieval of the product identification strings for the scanned plurality of machine readable labels.

            27.     The method of Claim 26 further comprising scanning the machine  
30     readable label of the sales receipt to obtain the product identification strings for the

scanned plurality of machine readable labels and wherein maintaining a record includes maintaining records for the obtained product identification strings.

28. The method of Claim 6 wherein maintaining a record comprises  
5 maintaining a plurality of records of product identification strings associated with a plurality of products of the user and wherein the method further comprises:

scanning a user brand loyalty card and/or bank card at a purchase location;

scanning a plurality of machine readable labels associated with the products  
of the user at a purchase location; and

10 associating product identification strings for the scanned plurality of machine readable labels with the scanned user brand loyalty card and/or bank card to allow retrieval of the product identification strings for the scanned plurality of machine readable labels.

15 29. The method of Claim 28 further comprising scanning the user brand loyalty card to obtain the product identification strings for the scanned plurality of machine readable labels and wherein maintaining a record includes maintaining records for the obtained product identification strings.

20 30. The method of Claim 28 further comprising obtaining the product identification strings for the scanned plurality of machine readable labels from a provider of the bank card and wherein maintaining a record includes maintaining records for the obtained product identification strings.

25 31. A method of communicating product status information comprising:  
receiving from a requestor a batch status request including a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product, wherein the batch status request includes no personal information of the user;

30 querying a directory service including a plurality of records associating product identification strings with batch identifications for corresponding products,

wherein a product type has a plurality of associated product identification strings associated with different batches of the product type and wherein the corresponding products are provided with a machine readable label including an associated one of the product identification strings, to obtain the requested batch status information; and  
5 transmitting the obtained batch status information for the product to the requestor.

32. A consumer appliance comprising a scanner configured to obtain a  
10 product identification string from a product and a controller configured to determine batch status information for a scanned product based on the obtained product identification string.

33. The consumer appliance of Claim 32 wherein the controller is  
15 further configured to repeatedly verify batch status information for a scanned product.

34. The consumer appliance of Claim 32 further comprising a database including a plurality of records of product identification strings associated with a  
20 plurality of products of the user and wherein the controller is configured to determine batch status information for the plurality of products of the user based on the product identification strings.

35. A system for communicating product status information  
25 comprising:  
means for maintaining a record of a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product;  
means for transmitting a batch status request to a directory service  
30 maintaining batch status information at selected intervals and/or responsive to a user request; and

means for receiving the requested batch status information for the product.

36. The system of Claim 35 wherein the batch status request includes no identification of the user.

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37. The system of Claim 35 further comprising means for scanning a product label of the product to obtain the product identification string.

38. A system for communicating product status information  
10 comprising:

means for receiving from a requestor a batch status request including a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product, wherein the batch status request includes no personal information of the user;

15 means for querying a directory service including a plurality of records associating product identification strings with batch identifications for corresponding products, wherein a product type has a plurality of associated product identification strings associated with different batches of the product type and wherein the corresponding products are provided with a machine readable  
20 label including an associated one of the product identification strings, to obtain the requested batch status information; and

means for transmitting the obtained batch status information for the product to the requestor.

25 39. A computer program product for communicating product status information, comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

30 computer readable program code configured to maintain a record of a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product;

computer readable program code configured to transmit a batch status request to a directory service maintaining batch status information at selected intervals and/or responsive to a user request; and

5 computer readable program code configured to receive the requested batch status information for the product.

40. A computer program product for communicating product status information, comprising:

10 a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code configured to receive from a requestor a batch status request including a product identification string associated with a product of a user, the product identification string being associated with a corresponding batch of the product, wherein the batch status request includes no  
15 personal information of the user;

computer readable program code configured to query a directory service including a plurality of records associating product identification strings with batch identifications for corresponding products, wherein a product type has a plurality of associated product identification strings associated with different batches of the  
20 product type and wherein the corresponding products are provided with a machine readable label including an associated one of the product identification strings, to obtain the requested batch status information; and

computer readable program code configured to transmit the obtained batch status information for the product to the requestor.

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41. A method of communicating product status information comprising:  
obtaining a product identification string of a product of a user, wherein the product identification string is associated with a plurality of batches, one of which is associated with the product;

30 transmitting a batch status request including the obtained product identification string to a directory service maintaining batch status information;



receiving the requested batch status information for the product, wherein the batch status information includes information associated with the plurality of batches; and

notifying the user of received batch status information for respective ones  
5 of the plurality of batches.